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Relaxing Access to Liver Transplantation with Living Donation: A Foolish Move or a Time to Change?

John G. O'Grady

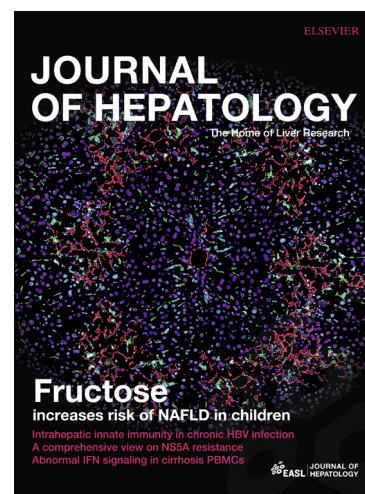
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Relaxing Access to Liver Transplantation with Living Donation: A Foolish Move or a Time to Change?

John G. O'Grady MD FRCPI

King's College Hospital

Denmark Hill

London SE23 3QN

UK

john.o'grady@kcl.ac.uk

(44) 2082994000

Liver transplantation is transformative for patients with an extensive range of liver diseases. Early outcomes are excellent and extended survival beyond 20 years is now a realistic expectation for many patients receiving liver grafts. The success of liver transplantation is counter-balanced by the limitations imposed by the number of organs available from deceased donors and this has, appropriately, created an ethos that maximum benefit should be derived by society from the organs generously donated. Individual patients do not have an entitlement to liver transplantation and those fortunate enough to be selected to receive an organ are expected to conform to restrictive policy and regulation designed to maximise the quantum of that benefit. The boundaries that have evolved are clear, but not necessarily fair, and many more patients are excluded from access to an intervention from which they would benefit to a substantial degree.

Donation of liver tissue by a volunteer changes the dynamic of access to transplantation but not necessarily the associated restrictions. The Vancouver Forum report stated that 'the indications for live donor liver transplantation should be the same as those for deceased donor transplantation'(1). Maintaining consistent discipline across the entire practice of liver transplantation has merit as it supports the principle that the degree of risk to the donor is justified by the high expectation of benefit to the recipient. However, the clarity of that quote is challenged by another statement from the same report that stated 'survival of a live donor should approximate to the expected outcome for a recipient with the same aetiology undergoing a deceased donor transplant'(1). This loop hole allows a case to develop that is permissive of minor relaxations of policy and this is precisely what is argued by Lieber et al in this month's edition of the Journal of Hepatology (2).

The clinical vignettes used to develop the case are two real stories with some modifications designed to enhance clarity and insightfulness. One of these uses the easily recognisable scenario of hepatocellular carcinoma that is marginally excluded from transplantation on the basis of tumour bulk. The Vancouver Forum report considered hepatocellular to be controversial but confirmed that the indications for transplantation should be the same for deceased and living donors. An international consensus in 2010 addressed the issue and, while experts were divided, the jury took a conditional stance which was permissive but stipulated that clarity of position, good communication and rigorous surveillance were essential requirements if offering liver transplantation to patients beyond standard criteria (3). The unique features of living donation could make it ethical if the 5-year survival rate was greater than 50%, which is the empiric but widely utilised metric by which outcomes are judged as acceptable. Five-year survival rates well above this threshold have already been documented with modest expansions of the Milan criteria (4,5).

Unfortunately, Lieber and colleagues used the same threshold as the starting point from which to allow minor change, arguing that it could be reduced from 50% to 40% 5-year survival. Firstly, this degree of change does not seem to be consistent with the spirit of a minor adjustment. Secondly, and more importantly, the tumour bulk profiles associated with these outcomes as predicted by the 'metroticket' would allow transplantation in patients with more than 10 nodules or with a nodule with a maximum diameter of 10cm (6). This represents a radical shift in the practice of transplantation for hepatocellular carcinoma and is unlikely to gain much support, even though the results are perfectly acceptable by general oncological principles. However, this does not discredit the argument entirely as the use of 75% and 70% thresholds would have reflected a liberalisation from 2 nodules up to 4 cm in

diameter to 4 nodules with a maximum diameter of 6 cm. The degree of change is much more compatible with the starting premise of marginal change.

With this change in perspective, the argument put by Lieber becomes more compelling at an individual patient level. Advocating clinicians would point to an excellent outcome in the absence of any disadvantage other than to the donor who must be accepting of a 0.4% risk of death and a 35% morbidity rate (1). Why then should the case not be approved? One reason is that the *status quo* is transparent and equitable and thus a comfortable benchmark in the decision-making paradigm. Change brings uncertainty and in the case of this example there may be a degree of concern that this adjustment is the thin edge of the proverbial wedge that could gather momentum and drive radical departure from current practice. A potential compromise would be to agree a limited and defined modicum of change without setting a precedent for further modifications based on the same rationale.

The other case deals with behavioural and societal issues and is a much more difficult argument to engage objectively. I suspect many readers would forgive an 18-year old patient a lot and factor-in the potential to mature and function within the bounds of acceptable behaviour. The largesse of donation and the process of liver transplantation could be both the catalyst and sustaining drive for such change. On the other hand, it would be considered irresponsible to put a donor at risk if the recipient was exhibiting culpable recklessness and the decision of the team who are familiar with the details of the case warrants respect.

Alcohol-related liver disease was not addressed by Lieber et al but it is another example of behaviour influencing candidacy for liver transplantation. A commitment to abstaining from alcohol is a requirement for deceased donor transplantation and in many programmes the ability to do so needs to be demonstrated for a period of time before the candidate is activated on the wait list. However, this requirement is open to the criticism of not being evidence-based and empiric in its application. It is therefore a scenario where a difference in behaviour prior to deceased and living donor transplantation could emerge. The degree of drift from existing policy that would be considered minor and reasonable would be much more difficult to define than in the case of hepatocellular carcinoma. The possibility that access to living donor liver transplantation becomes easier for non-reformed alcohol abusers because of fame, wealth or power of persuasion should be resisted.

The principle that the indications for living and deceased donor transplantation must be identical is not sacrosanct. Change that maintains equivalence in outcome should be considered and the lessons learned can then be applied to the population awaiting deceased donor transplantation. The challenge is to regulate and monitor the change whilst maintaining a discipline that promotes the greater good.

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